

Title (en)

Assembling device with micrometrical angular adjustment with high precision and great stability, especially for mirrors and other components used for laser applications

Title (de)

Montagevorrichtung zur mikrometrischer Justierung der Winkelposition eines optischen Gegenstands mit hoher Präzision und grosser Stabilität, insbesondere für Spiegeln oder andere in Lasern anwendbare Komponenten

Title (fr)

Monture comportant des réglages angulaires micrométriques de haute précision et de grande stabilité, en particulier pour des miroirs ou d'autres composants utilisables pour des lasers

Publication

EP 1136866 A1 20010926 (EN)

Application

EP 00830217 A 20000322

Priority

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Abstract (en)

There is described an assembling device for mirrors or other components for laser applications consisting of a body (2) for housing the mirror (3). The body (2) has at least two segments (16, 17; 17, 40) and the device (1) has at least one mechanism (5; 21) for rotating the mirror (3) around an axis (X; Y) parallel to the mirror (3). The mechanism (5, 21) has a differential screw (6; 22) with two sections (7, 8; 23, 24) with different threading coupled to two balls (9, 10; 25, 26) which have through holes (11, 12; 27, 28) with different threading. The balls (9, 10; 25, 26) are engaged in relative seats (14, 15; 29, 30) in the two segments (16, 17; 17, 40) and can rotate around their own centre. The mechanism (5; 21) has one section (20; 41) that joins the two segments (16, 17; 17, 40) placed on one side opposite to the differential screw (6; 22) and parallel to it so that a tightening or loosening of the differential screw (6; 22) in the balls (9, 10; 25, 26) corresponds to a rotation of one of the two segments (16, 17; 17, 40) in relation to the other. <IMAGE>

IPC 1-7

G02B 7/182; F16H 25/20

IPC 8 full level

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CPC (source: EP)

G02B 7/1825 (2013.01)

Citation (search report)

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